Dennis G. PRIDDY

Appl. No. Examiner 09/420,459 Luong T. Nguyen

Docket No.

11104.2

CLAIM AMENDMENTS

1. (Currently Amended) A multi-function integrated semiconductor device comprising:

a single integrated circuit containing:

an image sensor including a plurality of light sensitive pixels for capturing an image in still and full-motion digital imaging;

a real-time image processing circuit, responsive to the light sensitive pixels, having as an output a digital representation of the image captured;

an automatic identification circuit <u>within the real-time image processing circuit</u>, responsive to a captured image, to <u>identify information coded in the image or generate an automatic identification indicia of a biometric attribute from a digitized image of said biometric attribute;</u>

means for inputting a biometric attribute;

a personal database secure to all but a specified user;

means for providing a wireless communication including an antenna, a transmitter, a receiver, a wireless communication protocol and an Internet browser; and

memory containing a first <u>automatic identification information of a biometric attribute of</u>
<u>the specified user and software for executing a predetermined application.</u>

2. (Currently Amended) The device of claim 1 wherein the means for inputting the biometric attribute further comprises means for deriving a second automatic identification indicia from said inputted biometric attribute and comparing said inputted biometric attribute second automatic identification indicia to the first automatic identification indicia and permitting the

Dennis G. PRIDDY

Appl. No.

09/420,459

Examiner Docket No. Luong T. Nguyen

specified user access to the secure personal database in response to the second automatic

identification indicia input biometric attribute matching the first automatic identification indicia

biometric attribute.

3. (Currently Amended) The device of claim 1 further comprising a lens disposed to

project an image on said image sensor, a digital processing unit, and an input/output means for

transmitting the digital representation of a captured image to a remote device, wherein the digital

processing unit is integrated with a first memory and the image processing circuit interrogates

the captured image in real-time in said memory.

4. (Currently Amended) The device of claim 1 further comprising a supplemental

memory, a digital processing unit, a lens disposed to project an image on said image sensor, and

an input/output means for transmitting the digital representation of a captured image to a remote

device, wherein the digital processing unit is integrated with the memory, the supplemental

memory, and the real-time image processing circuit and stores the digital representation image in

one of the memory and the supplemental memory.

5. (Currently Amended) The device of claim 3, further comprising:

an interface for a voice/data communications channel to a networked computer server,

said communications channel comprising at least one of the group consisting of a cellular

telephone network, a satellite telephone network, a wide-area network, a local-area network, and

the Internet browser;

3

Dennis G. PRIDDY

Appl. No.

09/420,459 Luong T. Nguyen

Examiner Docket No.

11104.2

means for real-time scanning, decoding, and transmitting via the interface, information

encoded in an automatic identification indicia, said indicia being selected from among the group

consisting of bar codes, matrix codes, Optical Character Recognition (OCR), and Radio

Frequency Identification Tags (RFID);

wherein the image processing circuit further comprises means for capturing single and

sequential digital images, and wherein the digital processing unit comprises means for

transmitting said images including data element identifiers via the interface over the

communications channel to a remote location;

wherein the personal database comprises personal identification and credit card/debit card

account information; and

a digital processor operable to transmit queries, receive textual and graphic responses,

execute secure purchase of goods or services, and remotely store records related to electronic

commerce transactions, and to execute the secure purchase of non-electronic commerce goods

and services;

wherein the multifunction integrated semiconductor device is incorporated within a

wireless communications product.

6. (Previously Presented) The device of claim 5 wherein the digital processor

further comprises means for generating and transmitting a digital security code based on an input

biometric attribute and incorporating data element identifiers.

7. (Previously Presented) The device of claim 5 wherein the digital processor

further comprises means for activating a large scale processing application on a remote server.

4

Dennis G. PRIDDY

Appl. No. Examiner 09/420,459 Luong T. Nguyen

Docket No.

11104.2

8. (Previously Presented) The device of claim 5 wherein the digital processor further comprises means for securely executing personal financial transactions.

9. (Currently Amended) A communications node comprising means for receiving a transmission incorporating data element identifiers and containing a digital template an automatic identification indicia associated with a remote user, said digital template comprising biometric attribute derived from an original digital image automatic identification indicia being determined from a digital representation of a biometric attribute of said remote user and distinct from said digital representation, and means for identifying said user in response to said digital template received automatic identification indicia.

- 10. (Currently Amended) The communications node of claim 9 further comprising a database comprising a plurality of securely stored biometric attribute data templates automatic identification indicia corresponding to a second plurality of remote users.
- 11. (Currently Amended) The communications node of claim 9 further comprising means for verifying the identity and authenticity of the <u>remote</u> user associated with <u>said</u> received biometric attribute template <u>automatic identification indicia</u> wherein the transmission is associated with said <u>remote</u> user conducting a financial transaction and said transmission includes <u>remote</u> user credit or debit account information.

Dennis G. PRIDDY

Appl. No. Examiner

09/420,459 Luong T. Nguyen

Docket No.

11104.2

12. (Currently Amended) The communications node of claim 9 wherein the transmission includes data corresponding to a digital template image, further comprising means for storing the template received digital data corresponding to the original digital image.

13. (Currently Amended) The communications node of claim 12, further comprising means for downloading to a plurality of remote display devices, said stored digital template data corresponding to a digital image, said remote display devices being selected from among the group consisting of portable wireless communication devices, personal computers, and cable connected television sets.

14. (Currently Amended) A wireless communications system comprising:

a multi-function integrated semiconductor device comprising a single integrated circuit having:

an image sensor including a plurality of light sensitive pixels for capturing an image in still and full-motion digital imaging;

a real-time image processing circuit, responsive to the light sensitive pixels, having as an output a digital representation of the image captured separate from said image captured;

a digital processing unit;

an automatic identification circuit <u>within the real-time processing circuit</u>, responsive to a captured image, to generate an automatic identification indicia of a biometric attribute from a <u>digitized image of said biometric attribute</u> identify in real-time information coded in the image;

a personal database secured to all but a specified user;

means for inputting a biometric attribute;

Dennis G. PRIDDY

Appl. No.

09/420,459 Luong T. Nguyen

Examiner Docket No.

11104.2

means for providing a wireless communication including an antenna, a transmitter, a receiver, a wireless communication protocol and an Internet browser;

a memory containing a first biometric attribute and software for executing a predetermined application; and

a supplemental memory, a lens disposed to project an image on said image sensor, and an input/output means for transmitting the digital representation of a captured image to a remote device, wherein the digital processing unit is integrated with the second memory, the supplemental memory, and the real-time image processing circuit in a single integrated circuit module and said digital processing unit stores the captured image in one of the memory and the supplemental memory; and

a communication node capable of receiving digital images transmitted via said module, said communication node being remote from said module.

15. (Currently Amended) A portable wireless communications device comprising a multi-function integrated semiconductor device having integrated therein in a single integrated circuit a personal database secure to all but a specified user, a sensor responsive to a biometric attribute, and a processor responsive to said biometric sensor and said secure personal database for verifying a biometric attribute of said specified user sensed by said biometric sensor, and granting said specified user access to said secure personal database on biometric verification.

Applicant Appl. No. Examiner Dennis G. PRIDDY

09/420,459 Luong T. Nguyen

Docket No.

11104.2

16. (Currently Amended) The device of claim 15 further comprising means for transmitting to a remote location a copy of said <u>sensed</u> biometric attribute in response to a failure to verify said biometric attribute.

17. (Withdrawn) A method of transacting commerce comprising:

providing a portable two-way communication device;

entering a product description including a price into said device;

accessing a remote database by a wireless communication channel;

searching said remote database for data including prices corresponding to said product;

comparing said pricing in said remote database and said stored product description;

selecting a product to be purchased; and

initiating a wireless transmission of personal financial data via a secure data transmission including a biometric attribute to make the purchase.

- 18. (Withdrawn) The method of claim 17 further comprising a completing the financial transaction and receiving a transaction record number, and storing the transaction number in the portable two-way communication device.
- 19. (Withdrawn) The method of claim 17 wherein entering a product description further comprises wirelessly sensing data corresponding to a product identification code and automatically identifying a product description therefrom.
- 20. (Withdrawn) The method of claim 19 wherein wirelessly sensing data further comprises optically scanning in an image.

Applicant Appl. No. Examiner Dennis G. PRIDDY 09/420,459

Examiner : Luong T. Nguyen Docket No. : 11104.2

21. (Withdrawn) The method of claim 17 wherein selecting a product to be purchased further comprises selecting one of the entered product description or a product description from said remote database.

22. (Withdrawn) A method of transacting commerce comprising: employing a portable two-way communication device storing personal financial data in said device; entering one of a biometric attribute and a personal identification code ("PIN") into said communication device, authenticating a user based on the entered one of the biometric attribute and PIN and, in response to authenticating the user, transmitting personal financial data to complete the transaction without surrendering physical custody the device containing the personal financial data.

23. (New) The device of claim 1 wherein the real time automatic identification circuit is further responsive to said captured digitized image to identify a non-biometric automatic identification indicia coded within the digitized image.

24. (New) The device of claim 23 wherein the non-biometric automatic identification indicia is selected from among the group consisting of a bar code, a matrix code, optical character recognition, and a radio frequency identification tag.

25. (New) The communications node of claim 9 wherein the transmission receiving means further comprises means for receiving a non-biometric automatic identification indicia determined from information coded within the digitized image.

26. (New) The wireless communication system of claim 25 wherein the non-biometric automatic identification indicia is selected from among the group consisting of a bar code, a matrix code, optical character recognition, and a radio frequency identification tag.

Applicant Appl. No. Examiner Dennis G. PRIDDY

09/420,459 Luong T. Nguyen

Docket No.

11104.2

27. (New) The device of claim 14 wherein the real time automatic identification circuit is further responsive to said captured digitized image to identify a non-biometric automatic identification indicia coded within the digitized image.

- 28. (New) The device of claim 27 wherein the non-biometric automatic identification indicia is selected from among the group consisting of a bar code, a matrix code, optical character recognition, and a radio frequency identification tag.
- 29. (New) The wireless communication system of claim 15 wherein the processor further comprises an automatic identification circuit responsive to a captured image to identify a non-biometric automatic identification indicia coded within the digitized image, said non-biometric automatic identification indicia being selected from among the group consisting of a bar code, a matrix code, optical character recognition, and a radio frequency identification tag.